

This is an application for partial funding of the second conference on Endothelium and Cardiovascular Function, to be held under the auspices of the Federation of American Societies for Experimental Biology (FASEB), from July 28 to August 2, 1991, in Copper Mountain, Colorado. Participation will be limited to 200 scientists (including the speakers and discussion leaders), who will be selected on the basis of their expertise and interests as most likely to contribute to a stimulating and productive environment. The meeting, for the second time, will focus on the role of the endothelium in interacting with the blood and modulating the responsiveness of the underlying vascular smooth muscle in health and disease. It will also address the possible role of endothelium-derived mediators in non-vascular tissues. The conference will consist of nine scientific sessions, each with four to six speakers and a discussion leader; all will be investigators with wide experience in the endothelium and its function. In addition, a poster session will be held daily, which will allow more junior participants to present their data and discuss them with the authorities in the field. The central theme will be the ability of the endothelium to alter the amounts of anti-adhesive, anti-aggregatory and vasoactive factors made available to the blood components and/or to the underlying vascular smooth muscle. These discussions will permit the understanding of the true role of the endothelial cells in modulating the fluidity of the blood and local vasomotor responses under normal and pathological conditions. They will be key to determining the contribution of endothelium-dependent phenomena in the etiology of a variety of cardiovascular dysfunctions, and hence, provide insight into their rational treatment.

## BACKGROUND AND FORMAT:

The first series of summer conferences sponsored by the Federation of American Societies for Experimental Biology (FASEB) was held in 1982 at the Vermont Academy. Since then, a broad range of basic topics has been covered each summer and participants have judged the meetings to have been scientifically successful and productive. This has been particularly the case for the first summer FASEB conference on "Endothelium and Cardiovascular Function", which was held in 1988. From July 28th to August 2, 1991, FASEB will sponsor the second summer conference on Endothelium and Cardiovascular Function. Conference organizers are Paul M. Vanhoutte, (Baylor College of Medicine, Houston, Tx.), Chairman, and Wayne Alexander (Emory University, Atlanta, Ga.) and Rudi Busse (Albert Ludwigs Universitat, Freiburg, F.R.G.), co-Chairmen. The meeting will be held at Copper Mountain, Colorado.

The 1991 Conference on Endothelium and Cardiovascular Function will follow the guidelines previously established for FASEB conferences, which are similar to those of the Gordon Research Conferences. There will be nine major scientific sessions, held daily from 9:00am to until noon, and 7:30-10pm. Afternoons are left free for poster sessions, informal discussions, and recreation. Speakers will be limited to six per session and ample time for discussion is planned. This format has proven highly effective for promoting maximal scientific communications and interaction. FASEB regulations specifically exclude recording of scientific sessions or subsequent publication of any portion of the proceedings; these requirements encourage presentation of new data and in particular stimulate informal discussion and exchange of ideas. Also, aiding in the

viewed so far as a cohesive body of knowledge only in a limited number of meetings, of which the previous first FASEB summer conference on the same topic (held in Copper Mountain in 1988) was extremely successful and scientifically rewarding. The discovery of the ability of the endothelial cells to modulate the responsiveness of the underlying vascular smooth muscle has triggered a true revolution in the thinking about vascular function in health and disease, and initiated countless investigations around the world. The results of these studies have potential, major implication for the understanding of the normal and abnormal function of the cardiovascular system, as well as for the tailoring of specific drugs and dietary maneuvers to optimize this important function of the endothelial cells. Therefore, a major aim of this conference is to provide a forum for easy and productive exchange of scientific information and ideas, to stimulate further thinking, and to prevent unnecessary or repetitive investigations. The participants all will have worked (or intend to work) in one or the other aspects of endothelial control of vascular function. In particular, the meeting should bring together leading scientists and young investigators concerned with the physiology, biochemistry, cellular biology, pathology and pharmacology of the endothelium, seen as a site of production (or transformation) of anti-adhesive, anti-aggregatory and vasoactive substances. Thus, the 1991 conference will stimulate discussion of the most recent observations which pertain to endothelial control of the coagulation of blood and the production of relaxing and constricting factors, as well as of abnormal responses resulting from the altered ability of the altered ability of the endothelium to perform these functions. A major asset will be that the meeting will encourage a meaningful dialogue between younger investigators, who have recently entered (or are interested in entering) the field, and more experienced

scientists in the various areas of the endothelium-dependency of vascular responsiveness and thrombosis.